

### Remarks

Support for mass spectrometer in Claims 10 and 45 may be found in the Specification at page 31, line 25 and Table G; Support for virus in Claim 44 may be found in prior claim 44.

The typos in claims 4, 10 and 40 have been corrected in the Amendments to the Claims section.

The Examiner is thanked for withdrawing the rejection of Claim 9 under 35 USC 112.

Also "target" is deleted from Claim 4a to avoid confusion with the "target" of 4f.

For reference, portions of pages 2 and following of the Office Action are set forth below with Applicants' responses interlineated.

*The following rejections are being newly applied, which have been necessitated by amendment:*

*The following is a quotation of the second paragraph of 35 U.S.C. 112:*

*The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.*

*Claims 4-10, 19, 21, 23, 24, 28-29, and 39-47 and all claims dependent*

*Page 4*

*therefrom are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.*

*Claim 4 (and all claims dependent therefrom) comprise step D, which recites "tabulating in a programmed computer the extent to which the presence of the characteristic of each node in the bifurcating node phylogenetic tree of genetic relationships," which has been deemed as vague and indefinite. Step D is unclear as to what the method step actually tabulates. Clarification via clearer claim wording is required.*

*Claims 4 and 10 (and claims dependent therefrom) recite the limitation "the signature database" in line 1 of step E of claim 4 and line 1 of step F of claim 10. There is insufficient antecedent basis for this limitation in the claim.*

Claim 4 Steps C and D are combined and recited in more clarity.

*Claim 10 (and all claims dependent therefrom), step A, recites the method step of "obtaining or creating a nucleic acid sequence database of at least 12 of the same target nucleic acid," which has been deemed as vague and indefinite. It is unclear as to 12 of what are being obtained or created in said step. Clarification via clearer claim wording is required.*

At the interview, new wording was helpfully suggested by Examiner Sims and

that wording has been inserted into each of the independent Claims 4, 10 and 40. Ebersole, the sole reference, does not teach or even hint at this feature.

Additionally, Ebersole does not have the unexpected advantage of the invention. Ebersole cannot handle viruses. Ebersole, for example, cannot perform Applicants' Examples 6 or 8 in any way.

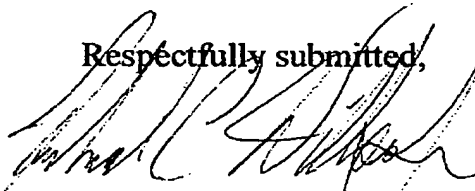
Ebersole must collect all sequences of his target group e.g. dechlorinating; then, must align those selected sequences; then find his "consensus sequence". In contrast, Applicants fragment to uniform length to form a hash of the same selected length according to Cl. 4 c & d, whereas Ebersole never teaches to fragment. Note that Claim 4c was inherent in 4d so they are now combined.

These Amendments are merely clarifying wording and no estoppel or new matter is involved.

Any necessary (small entity) charges can be charged to USPTO Deposit Account 200336 of Technology Licensing Co. LLC. Correspondence may be addressed to Customer No. 26830.

The Examiner is especially invited to suggest allowable subject matter and to telephone Applicants' Attorney if that would expedite prosecution and disposal of this Application. [Applicants attorney must be away through June 2011. He may be contacted through inventor Prof. Richard C. Willson III at phone 832 455 1428.]

Respectfully submitted,



Richard Coale Willson, Jr.

Attorney for Applicants  
Registration No. 22,080  
USPTO Customer 26830  
Technology Licensing Co. LLC  
3205 Harvest Moon Ste 200  
Telephone - 727 781 0089  
Fax: 727 785 8435

010AUS Signatures after 2nd RCE r 20110409.doc